## EOS AM-1 STATUS AM SCIENCE WORKING GROUP (SWAMP)

**KEVIN GRADY APRIL 3, 1997** 

## **EOS AM-1 RECENT ACCOMPLISHMENTS**

- COMPLETED DELIVERY OF ASTER AND CERES INSTRUMENTS. CERES INTEGRATED TO SPACECRAFT.
- MODIS AND MOPITT COMPLETED ASSEMBLY AND CURRENTLY IN ENVIRONMENTAL TEST. MISR ASSEMBLY NEARING COMPLETION.
- SPACECRAFT INTEGRATION PROGRESSING WELL
  - POWER AND C&DH SUBSYSTEMS INTEGRATED ONTO SPACECRAFT
  - GSE CONFIGURED FOR SPACECRAFT LEVEL TESTING
  - 98% OF SPACECRAFT BOXES FABRICATED
  - SOLAR ARRAY PROCEEDING THROUGH ENVIRONMENTAL TEST
- ATLAS IIAS: BOOSTER TANK, THRUST STRUCTURE, AND CENTAUR TANK DELIVERED. INTEGRATION IN PROCESS.
- SLC 3E: AM PECULIAR MODS IN PROCESS

Problem/Issue	Impact/Concern	Action	Status
MISR Electrical System Qualification.	Late delivery of MISR to spacecraft I&T.	Complete MISR rework and retest.	SYSCOM completed functional checkout. Conformal coat and bakeout in process. Minor intermittent dropouts still being worked.
Solid State Recorder Technical problems.	Completing Hardware-Software Integration. Potential delivery delay to spacecraft. Impact of Camden spinoff TBD.	Close out remaining issues.	■ Significant progress resolving HSI issues. Flight PROM burn-in to be completed this week.
SAD Life Test Failure	Late delivery to I&T. Design changes required.	Investigations in process. Two potential causes identified.	■ Identified cause of failure. Plan in place to rework flight and life test units.
MODIS Schedule	Potential impact to meeting Spacecraft I&T need date.	Maintain pace of progress through system level test.	T/V continuing. Presently able to work around chamber leaks.
MOPITT Schedule	Late delivery of MOPITT to spacecraft contractor.	Conducting ongoing visits. Develop I&T workaround approach.	Scan mirror motors delivered. EMI testing to begin this week.
NEA Qualification	Devices failed to actuate during test.	Determine problems with assembly procedures.	Assembly problems identified. Qual program to begin.
CERES FM4 bearing failure.	Azimuth bearing siezed. Cause under investigation.	Determine cause of failure.	Lubricant and residue tests in progress. Results due this week.
SSPA FET Life Test Results Unclear	Late delivery of SSPA if new lot of FETs is required.	Determine if original lot is flight worthy. Continue new lot to chip production stage. Develop screening plan for new lots.	Recommendation from Mitsubishi due this week. Independent lot assessment in process.
Impact of 2nd EOS Transponder Swap with Landsat	Delays integration of comm/CDH EM, integration onto spacecraft and subsequent integration of instruments. Further exacerbated by sine vib test.	Replan I&T flow to minimize impact of 3 month delay.	Detailed replan complete. LMMS proposal received. Second transponder experiencing problems with lo/synthesizer.
TRW Solar Array Schedule	Current schedule after T/V GSE failure is mid-August. Potential delay in delivery to spacecraft.	Improve schedule and move delivery back to June/July.	Completed blanket installation, deployments, and acoustic testing.

## **NEAR TERM PLANS**

- DELIVER MISR, MODIS AND MOPITT TO VALLEY FORGE AND COMPLETE BENCH ACCEPTANCE TEST
- SPACECRAFT
  - COMPLETE DELIVERY OF REMAINING COMPONENTS (S-BAND TRNSPDR, SSR, S/A, KMOD, XMOD, SAD)
  - COMPLETE INTEGRATION OF GN&C, SSR, PROPULSION AND X-BAND EQUIPMENT MODULES
    - INTEGRATE REMAINING INSTRUMENTS ONTO SPACECRAFT
    - PREPARE FOR 1st SPACECRAFT COMPREHENSIVE
- PERFORM 2<sup>nd</sup> END-TO-END TEST WITH CONTROL CENTER
- ATLAS IIAS: COMPLETE INTEGRATION OF L/V (AC-141). DELIVER PAYLOAD ADAPTER.